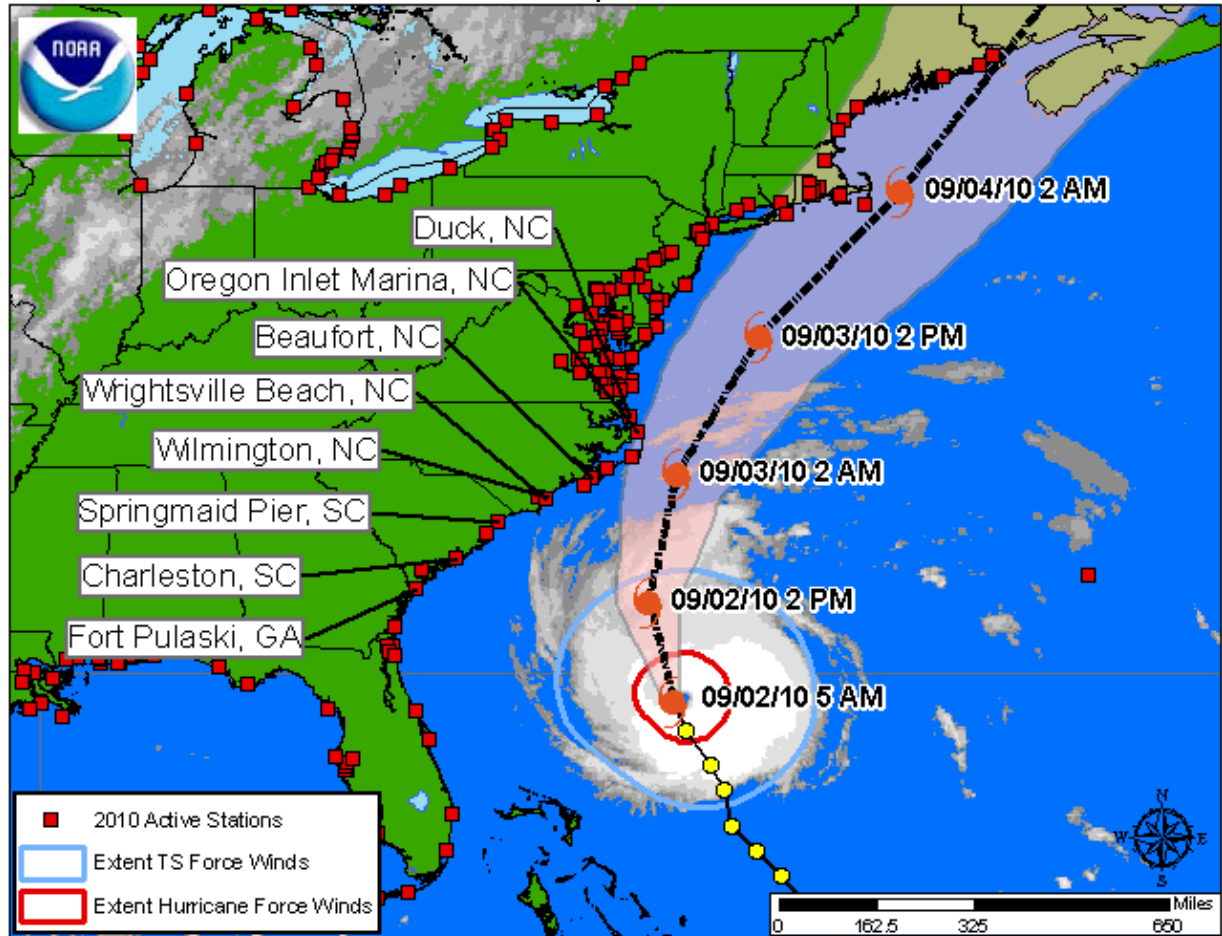




Hurricane EARL QuickLook
Posted: 06:00 EDT 09/02/2010

NOAA and NOAA Partnership Stations Relative to the Storm



Storm Analysis

As of 09/02/2010 06:00 EDT, water levels along the eastern U.S. Coastline from Georgia to South Carolina are rising and range between 0.4 to 0.8 feet above predicted levels. Water levels in North Carolina are at or near predicted levels. Winds are increasing from Georgia and southern North Carolina and generally range from 10 to 20 knots, with gusts upto 25 knots. Barometric pressure is falling across the region.

Water Level and Meteorological plots available below are updated automatically. Water level predictions relative to Mean Lower Low Water are:

Fort Pulaski, GA: Next predicted high tides are 7.43 ft (2.26 m) at 09/02/2010 15:03 EDT and 6.35 ft (1.93 m) at 09/03/2010 03:27 EDT.

Charleston, SC: Next predicted high tides are 5.75 ft (1.75 m) at 09/02/2010 14:48 EDT and 4.78 ft (1.46 m) at 09/03/2010 03:10 EDT.

Springmaid Pier, SC: Next predicted high tides are 5.49 ft (1.67 m) at 09/02/2010 14:23 EDT and 4.55 ft (1.39 m) at 09/03/2010 02:53 EDT.

Wrightsville Beach, NC: Next predicted high tides are 4.36 ft (1.33 m) at 09/02/2010 14:12 EDT and 3.45 ft (1.05 m) at 09/03/2010 02:35 EDT.

Wilmington, NC: Next predicted high tides are 4.49 ft (1.37 m) at 09/02/2010 16:11 EDT and 3.93 ft (1.20 m) at 09/03/2010 04:50 EDT.

Beaufort, NC: Next predicted high tides are 3.47 ft (1.06 m) at 09/02/2010 14:51 EDT and 2.80 ft (0.85 m) at 09/03/2010 03:06 EDT.

Oregon Inlet Marina, NC: Next predicted high tides are 1.29 ft (0.39 m) at 09/02/2010 14:52 EDT and 1.08 ft (0.33 m) at 09/03/2010 03:13 EDT.

Duck, NC: Next predicted high tides are 3.70 ft (1.13 m) at 09/02/2010 14:18 EDT and 2.84 ft (0.86 m) at 09/03/2010 02:43 EDT.

For additional data, please see the [Center for Operational Oceanographic Products & Services](#) website. For more information or archived products and reports, please see the [Storm_QuickLook](#) homepage.

Analyst:PFF

SELECT NATIONAL HURRICANE CENTER ADVISORY INFORMATION:

HURRICANE EARL ADVISORY NUMBER 32

500 AM EDT THU SEP 02 2010

...EARL STRENGTHENS A LITTLE MORE...NEW WARNINGS AND WATCHES ISSUED...

WATCHES AND WARNINGS

A HURRICANE WARNING IS IN EFFECT FOR...

*** BOGUE INLET NORTH CAROLINA NORTHEASTWARD TO THE NORTH CAROLINA/VIRGINIA BORDER INCLUDING THE PAMLICO AND ALBEMARLE SOUNDS.**

A HURRICANE WATCH IS IN EFFECT FOR...

*** NORTH OF THE NORTH CAROLINA/VIRGINIA BORDER TO CAPE HENLOPEN DELAWARE.
* WESTPORT TO PLYMOUTH MASSACHUSETTS...INCLUDING MARTHAS VINEYARD AND NANTUCKET.**

A TROPICAL STORM WARNING IS IN EFFECT FOR...

*** CAPE FEAR TO WEST OF BOGUE INLET NORTH CAROLINA.
* NORTH OF THE NORTH CAROLINA/VIRGINIA BORDER TO SANDY HOOK NEW**

JERSEY...INCLUDING DELAWARE BAY SOUTH OF SLAUGHTER BEACH AND THE CHESAPEAKE BAY SOUTH OF NEW POINT COMFORT.

*** THE COAST OF LONG ISLAND NEW YORK FROM FIRE ISLAND INLET NORTHWARD AND EASTWARD TO PORT JEFFERSON HARBOR.**

A TROPICAL STORM WATCH IS IN EFFECT FOR...

*** SANDY HOOK NEW JERSEY TO WOODS HOLE MASSACHUSETTS...INCLUDING BLOCK ISLAND AND LONG ISLAND SOUND.**

*** THE COAST OF LONG ISLAND NEW YORK WEST OF FIRE ISLAND INLET AND PORT JEFFERSON HARBOR.**

*** NORTH OF PLYMOUTH MASSACHUSETTS TO EASTPORT MAINE.**

*** THE COAST OF NOVA SCOTIA FROM PORT MAITLAND TO MEDWAY HARBOUR.**

A HURRICANE WARNING MEANS THAT HURRICANE CONDITIONS ARE EXPECTED SOMEWHERE WITHIN THE WARNING AREA.

A HURRICANE WATCH MEANS THAT HURRICANE CONDITIONS ARE POSSIBLE WITHIN THE WATCH AREA.

A TROPICAL STORM WARNING MEANS THAT TROPICAL STORM CONDITIONS ARE EXPECTED SOMEWHERE WITHIN THE WARNING AREA WITHIN 36 HOURS.

A TROPICAL STORM WATCH MEANS THAT TROPICAL STORM CONDITIONS ARE POSSIBLE WITHIN THE WATCH AREA...GENERALLY WITHIN 48 HOURS.

INTERESTS ELSEWHERE IN NORTHERN NEW ENGLAND AND SOUTHEASTERN CANADA SHOULD MONITOR THE PROGRESS OF EARL.

FOR STORM INFORMATION SPECIFIC TO YOUR AREA IN THE UNITED STATES...INCLUDING POSSIBLE INLAND WATCHES AND WARNINGS...PLEASE MONITOR PRODUCTS ISSUED BY YOUR LOCAL NATIONAL WEATHER SERVICE FORECAST OFFICE. FOR STORM INFORMATION SPECIFIC TO YOUR AREA OUTSIDE THE UNITED STATES...PLEASE MONITOR PRODUCTS ISSUED BY YOUR NATIONAL METEOROLOGICAL SERVICE.

DISCUSSION AND 48-HOUR OUTLOOK

AT 500 AM EDT THE CENTER OF HURRICANE EARL WAS LOCATED NEAR LATITUDE ABOUT 410 MI S OF CAPE HATTERAS NORTH CAROLINA ABOUT 870 MI SSW OF NANTUCKET MASSACHUSETTS. EARL IS MOVING TOWARD THE NORTH-NORTHWEST NEAR 18 MPH. A TURN TOWARD THE NORTH IS EXPECTED LATER TODAY...WITH A TURN TOWARD THE NORTH-NORTHEAST AND A FASTER FORWARD SPEED EXPECTED ON FRIDAY. ON THE FORECAST TRACK...THE CENTER OF EARL WILL PASS NEAR THE NORTH CAROLINA OUTER BANKS TONIGHT...AND APPROACH SOUTHEASTERN NEW ENGLAND FRIDAY NIGHT.

REPORTS FROM AN AIR FORCE RESERVE HURRICANE HUNTER AIRCRAFT INDICATE THAT MAXIMUM SUSTAINED WINDS ARE NOW NEAR 145 MPH WITH HIGHER GUSTS. EARL IS A CATEGORY FOUR HURRICANE ON THE SAFFIR-SIMPSON HURRICANE WIND SCALE. A GRADUAL WEAKENING IS EXPECTED TO START LATER TODAY.

HURRICANE-FORCE WINDS EXTEND OUTWARD UP TO 90 MILES FROM THE CENTER...AND TROPICAL-STORM-FORCE WINDS EXTEND OUTWARD UP TO 230 MILES.

THE MINIMUM CENTRAL PRESSURE ESTIMATED FROM THE HURRICANE HUNTER DATA IS 928 MB...27.40 INCHES.

HAZARDS AFFECTING LAND

WINDS...TROPICAL-STORM-FORCE WINDS ARE EXPECTED TO REACH THE NORTH CAROLINA COAST WITHIN THE WARNING AREA BY THIS AFTERNOON WITH HURRICANE FORCE WINDS OCCURRING BY THURSDAY NIGHT. TROPICAL-STORM- FORCE WINDS WILL LIKELY REACH THE COAST FROM VIRGINIA NORTHWARD TO NEW JERSEY BY LATE THURSDAY NIGHT OR EARLY FRIDAY.

STORM SURGE...A DANGEROUS STORM SURGE WILL RAISE WATER LEVELS BY AS MUCH AS 3 TO 5 FEET ABOVE GROUND LEVEL WITHIN THE HURRICANE WARNING AREA AND THE LOWER CHESAPEAKE BAY. ELSEWHERE WITHIN THE TROPICAL STORM WARNING AREA...STORM SURGE WILL RAISE WATER LEVELS BY AS MUCH AS 1 TO 3 FEET ABOVE GROUND LEVEL. NEAR THE COAST...THE SURGE WILL BE ACCOMPANIED BY LARGE AND DESTRUCTIVE WAVES.

RAINFALL...ACCUMULATIONS OF 2 TO 4 INCHES...WITH ISOLATED MAXIMUM AMOUNTS OF 6 INCHES...ARE EXPECTED OVER PORTIONS OF EASTERN NORTH CAROLINA INCLUDING THE OUTER BANKS. ACCUMULATIONS OF 1 TO 2 INCHES ARE POSSIBLE FARTHER TO THE NORTH ALONG THE IMMEDIATE MID-ATLANTIC COAST.

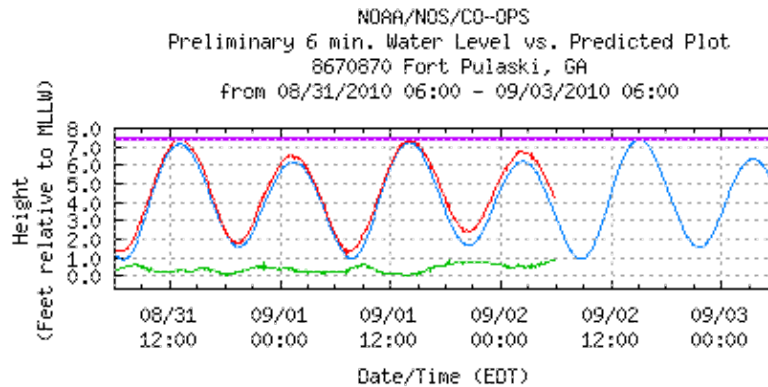
SURF...LARGE SWELLS FROM EARL WILL CONTINUE TO AFFECT THE BAHAMAS AND THE EAST COAST OF THE UNITED STATES THROUGH FRIDAY. THESE SWELLS WILL LIKELY CAUSE DANGEROUS SURF CONDITIONS AND RIP CURRENTS.

FORECASTER BEVEN

For the purpose of timely release, data contained within this QuickLook have undergone a "limited" NOS Quality Assurance/Control; however, the data have not yet undergone final verification. All data subject to NOS verification.

Jump to: [Fort Pulaski - Water Level](#), [Fort Pulaski - Winds](#), [Fort Pulaski - Barometric](#), [Fort Pulaski - Air/Water Temp](#), [Charleston - Water Level](#), [Charleston - Winds](#), [Charleston - Barometric](#), [Springmaid Pier - Water Level](#), [Springmaid Pier - Winds](#), [Springmaid Pier - Barometric](#), [Wrightsville Beach - Water Level](#), [Wrightsville Beach - Winds](#), [Wrightsville Beach - Barometric](#), [Wrightsville Beach - Air/Water Temp](#), [Wilmington - Water Level](#), [Wilmington - Barometric](#), [Wilmington - Air/Water Temp](#), [Beaufort - Water Level](#), [Beaufort - Winds](#), [Beaufort - Barometric](#), [Beaufort - Air/Water Temp](#), [Oregon Inlet Marina - Water Level](#), [Oregon Inlet Marina - Winds](#), [Oregon Inlet Marina - Barometric](#), [Oregon Inlet Marina - Air/Water Temp](#), [Duck - Water Level](#), [Duck - Winds](#), [Duck - Barometric](#), [Duck - Air/Water Temp](#),

Fort Pulaski, GA - [Return to List](#)



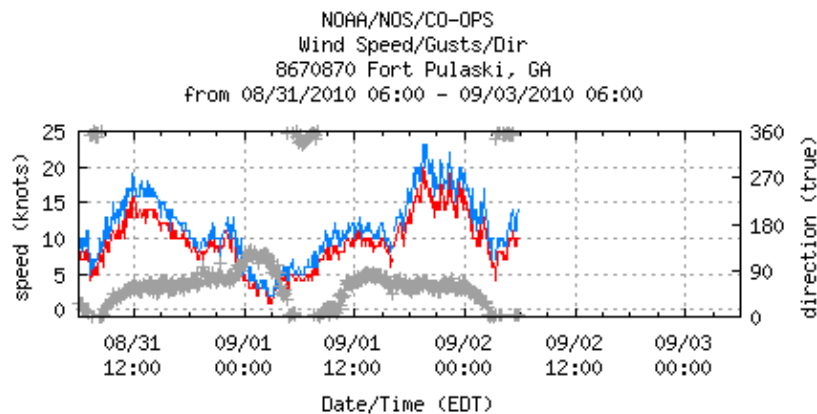
Predicted WL — (Obs-Pred) —
Observed WL — MHHW —

Last Observed Sample: 09/02/2010 05:48 (EDT)

Relative to **MLLW**: **Observed: 4.32 ft. Predicted: 3.44 ft. Residual: 0.88 ft.**

Historical Maximum Water Level: Oct 15 1947, 3.4 ft. above **MHHW**

Fort Pulaski, GA - [Return to List](#)

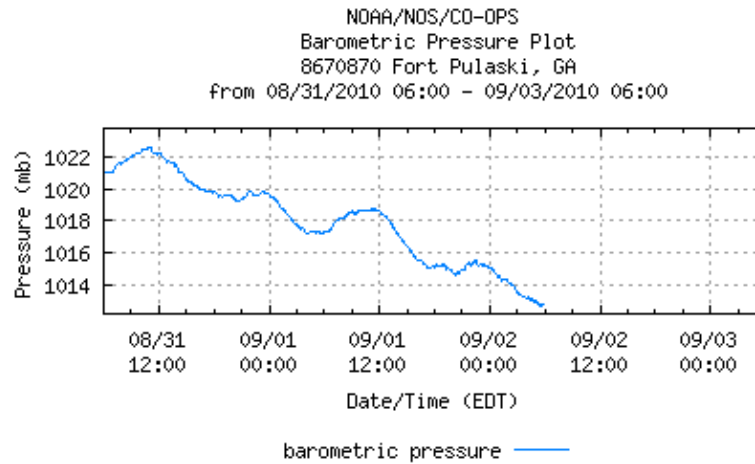


speed — gusts — direction +

Last Observed Sample: 09/02/2010 05:48 (EDT)

Wind Speed: 10 knots Gusts: 14 knots Direction: 005° T

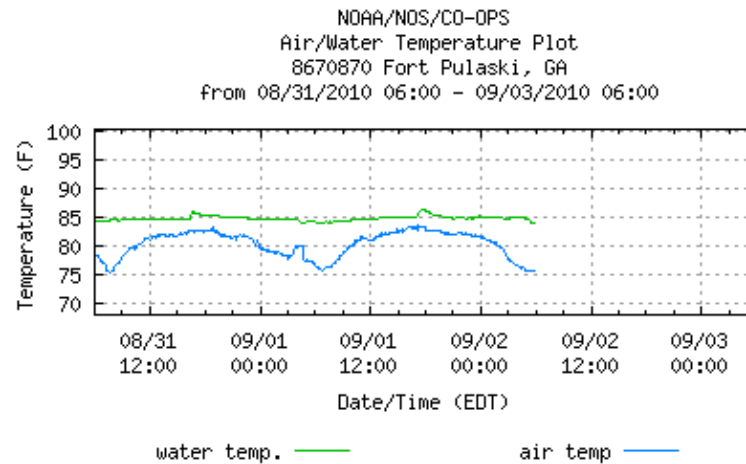
Fort Pulaski, GA - [Return to List](#)



Last Observed Sample: 09/02/2010 05:48 (EDT)

Barometric Pressure: 1012.8 mb

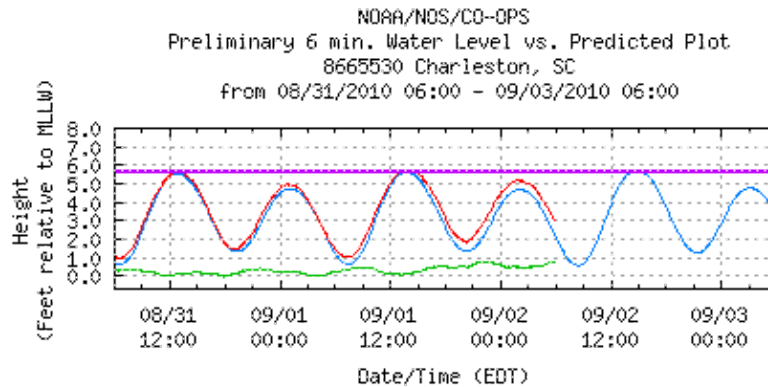
Fort Pulaski, GA - [Return to List](#)



Last Observed Sample: 09/02/2010 05:48 (EDT)

Water Temperature: 84.0° F Air Temperature: 75.7° F

Charleston, SC - [Return to List](#)



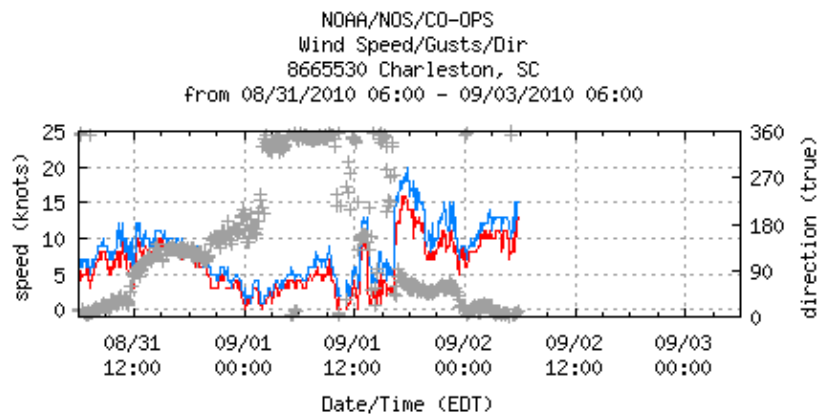
Predicted WL — (Obs-Pred) —
Observed WL — MHHW —

Last Observed Sample: 09/02/2010 05:48 (EDT)

Relative to **MLLW**: **Observed: 3.05 ft. Predicted: 2.30 ft. Residual: 0.75 ft.**

Historical Maximum Water Level: Sep 21 1989, 6.76 ft. above **MHHW**

Charleston, SC - [Return to List](#)

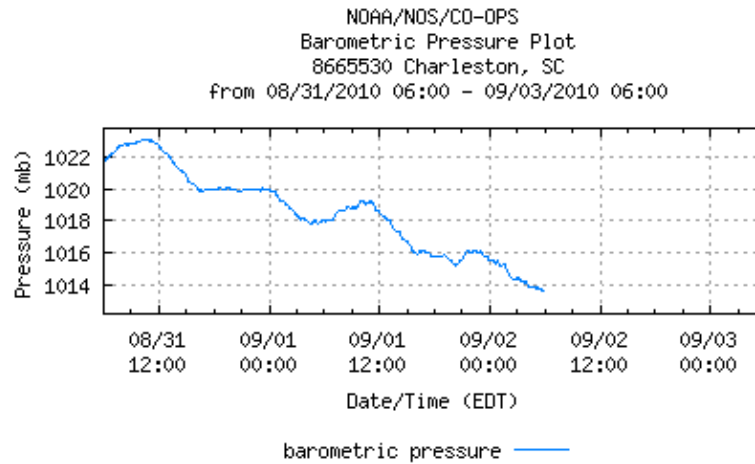


speed — gusts — direction +

Last Observed Sample: 09/02/2010 05:48 (EDT)

Wind Speed: 13 knots Gusts: 15 knots Direction: 011° T

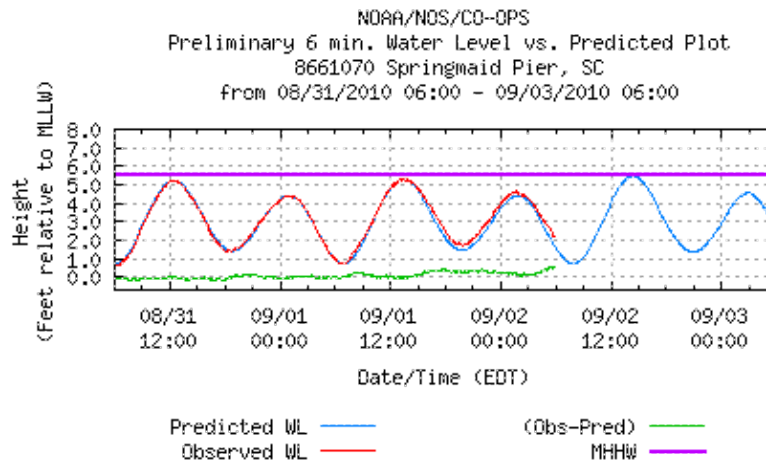
Charleston, SC - [Return to List](#)



Last Observed Sample: 09/02/2010 05:48 (EDT)

Barometric Pressure: 1013.6 mb

Springmaid Pier, SC - [Return to List](#)

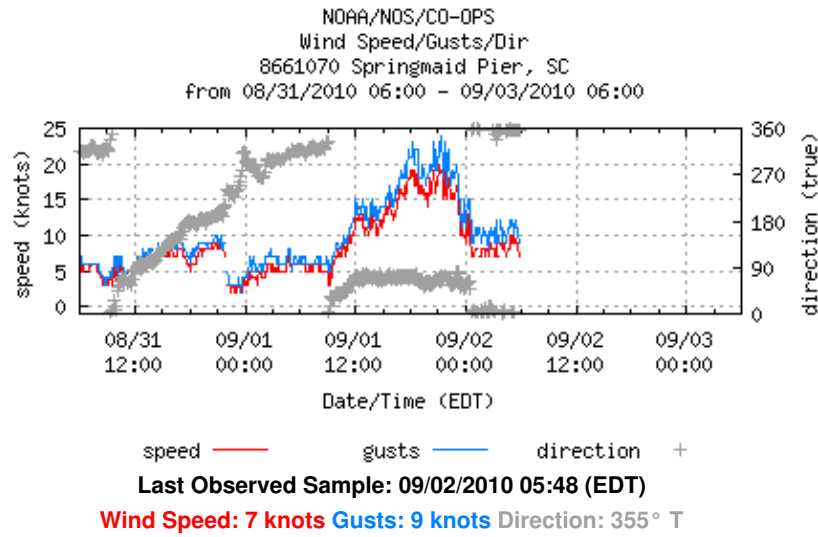


Last Observed Sample: 09/02/2010 05:48 (EDT)

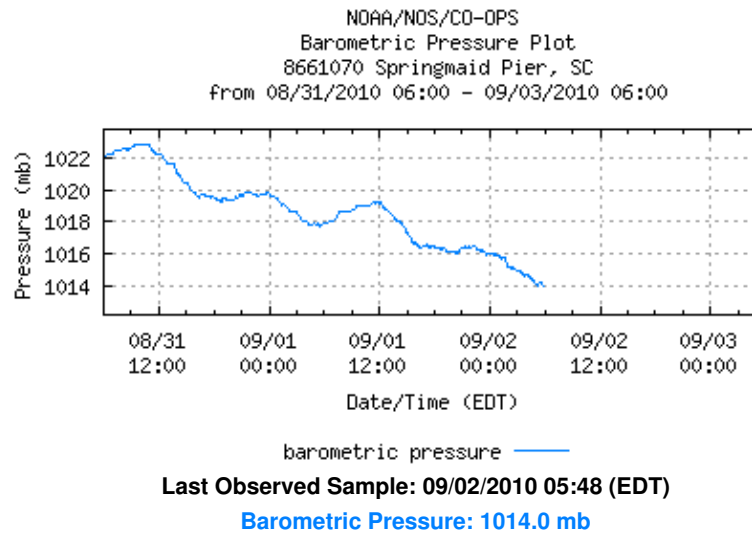
Relative to **MLLW**: Observed: 2.23 ft. Predicted: 1.72 ft. Residual: 0.51 ft.

Historical Maximum Water Level: Jan 1 1987, 3.65 ft. above **MHHW**

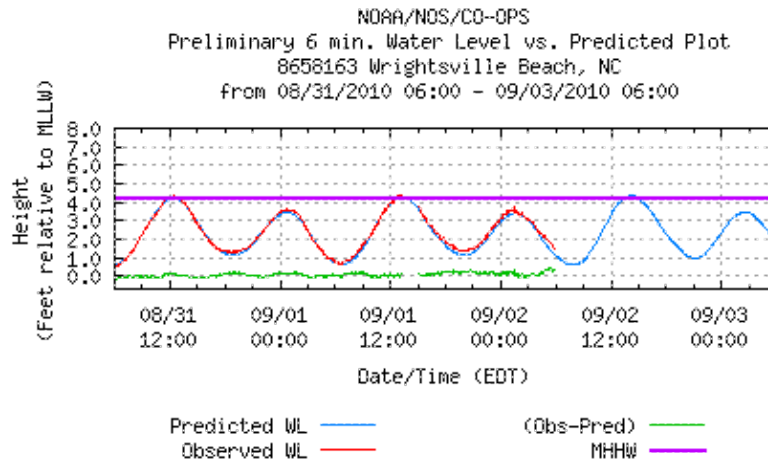
Springmaid Pier, SC - [Return to List](#)



Springmaid Pier, SC - [Return to List](#)



Wrightsville Beach, NC - [Return to List](#)

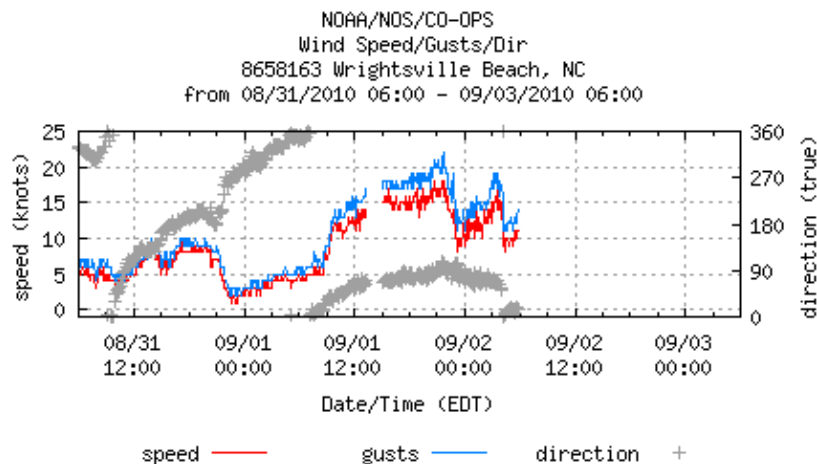


Last Observed Sample: 09/02/2010 05:48 (EDT)

Relative to **MLLW**: **Observed: 1.52 ft. Predicted: 1.21 ft. Residual: 0.31 ft.**

Historical Maximum Water Level: Sep 25 2008, 2.78 ft. above **MHHW**

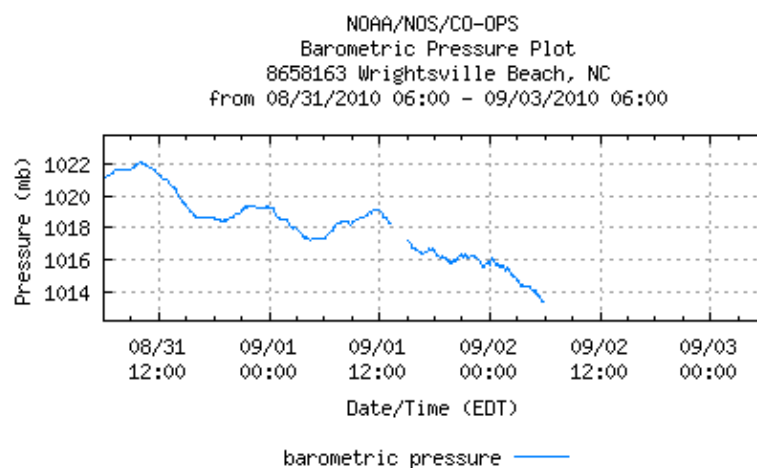
Wrightsville Beach, NC - [Return to List](#)



Last Observed Sample: 09/02/2010 05:48 (EDT)

Wind Speed: 11 knots Gusts: 14 knots Direction: 016° T

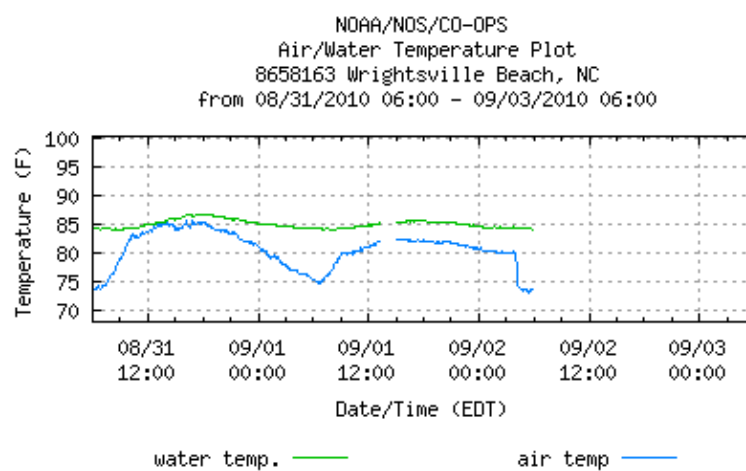
Wrightsville Beach, NC - [Return to List](#)



Last Observed Sample: 09/02/2010 05:48 (EDT)

Barometric Pressure: 1013.4 mb

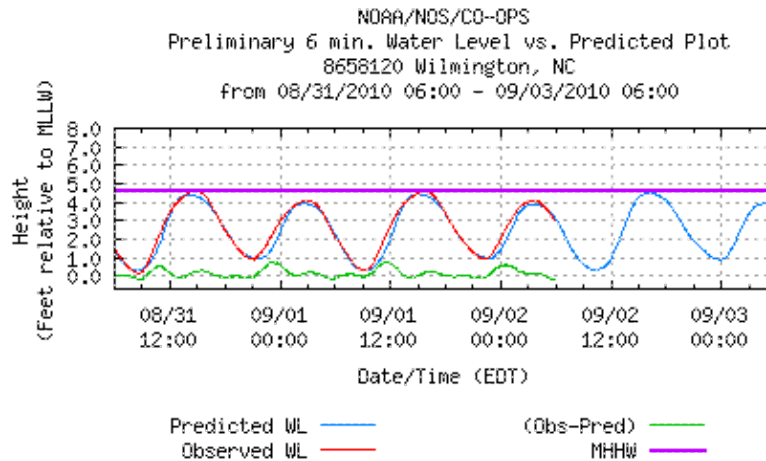
Wrightsville Beach, NC - [Return to List](#)



Last Observed Sample: 09/02/2010 05:48 (EDT)

Water Temperature: 84.2° F Air Temperature: 73.9° F

Wilmington, NC - [Return to List](#)

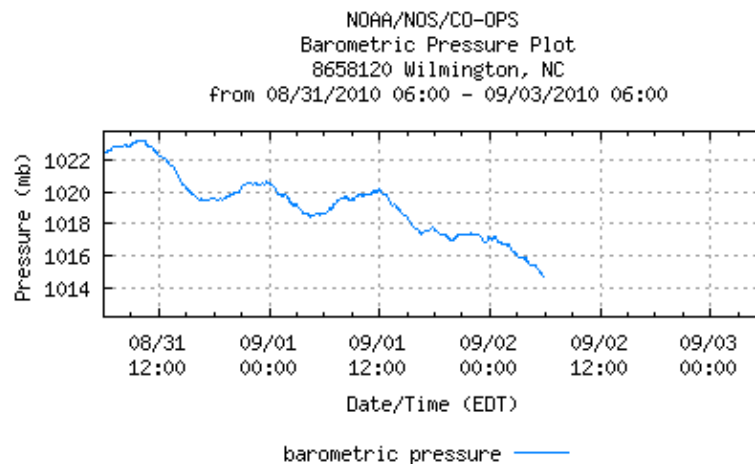


Last Observed Sample: 09/02/2010 05:48 (EDT)

Relative to **MLLW**: **Observed: 3.06 ft. Predicted: 3.23 ft. Residual: -0.17 ft.**

Historical Maximum Water Level: Oct 15 1954, 3.47 ft. above **MHHW**

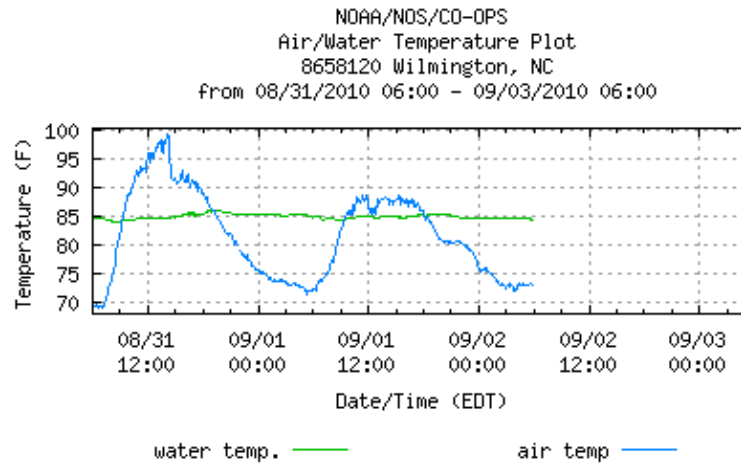
Wilmington, NC - [Return to List](#)



Last Observed Sample: 09/02/2010 05:48 (EDT)

Barometric Pressure: 1014.7 mb

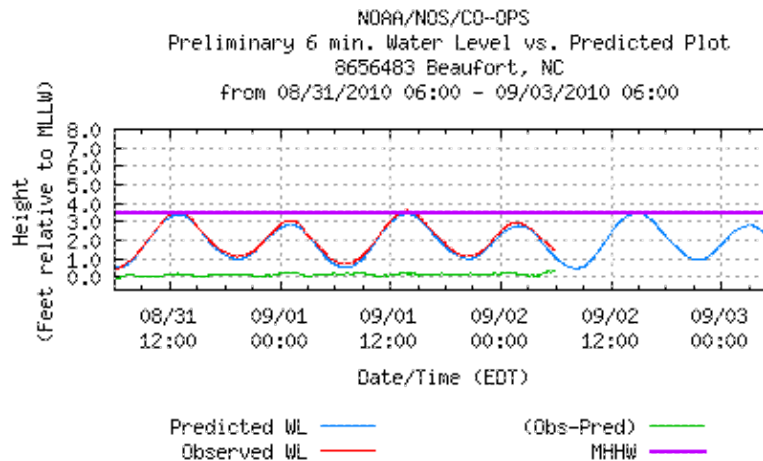
Wilmington, NC - [Return to List](#)



Last Observed Sample: 09/02/2010 05:48 (EDT)

Water Temperature: 84.6° F Air Temperature: 73.2° F

Beaufort, NC - [Return to List](#)

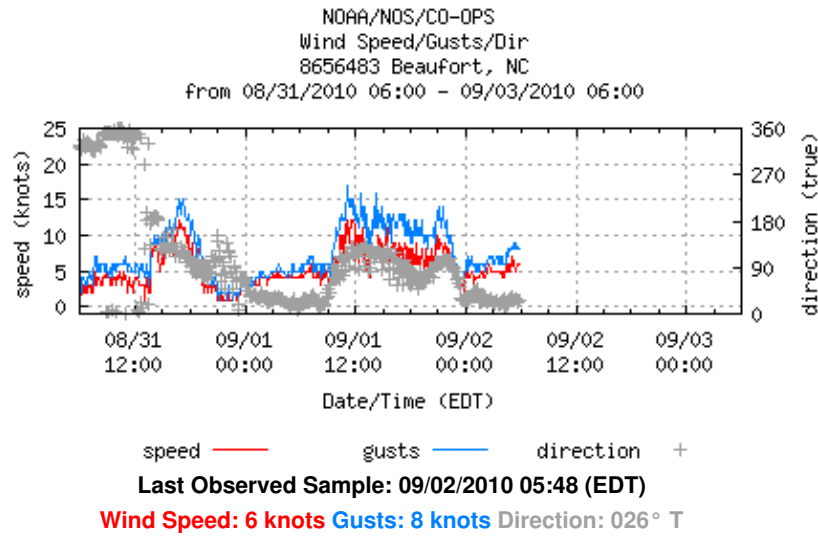


Last Observed Sample: 09/02/2010 05:48 (EDT)

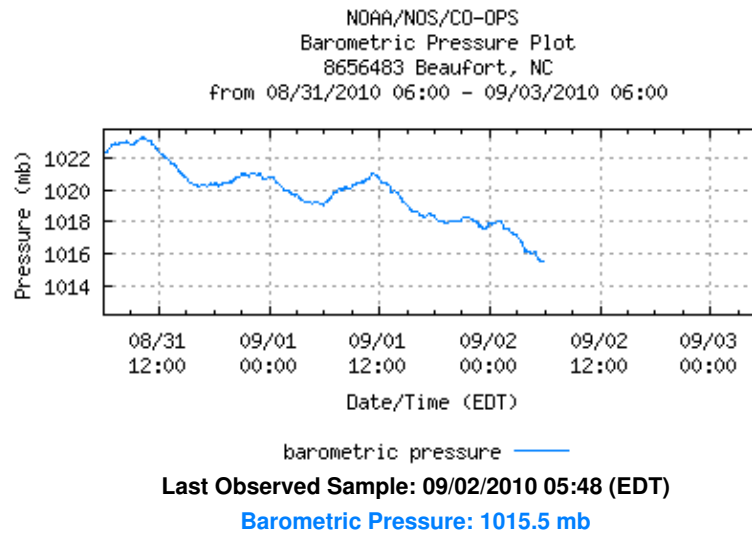
Relative to **MLLW**: Observed: 1.50 ft. Predicted: 1.14 ft. Residual: 0.36 ft.

Historical Maximum Water Level: Sep 16 1999, 2.74 ft. above **MHHW**

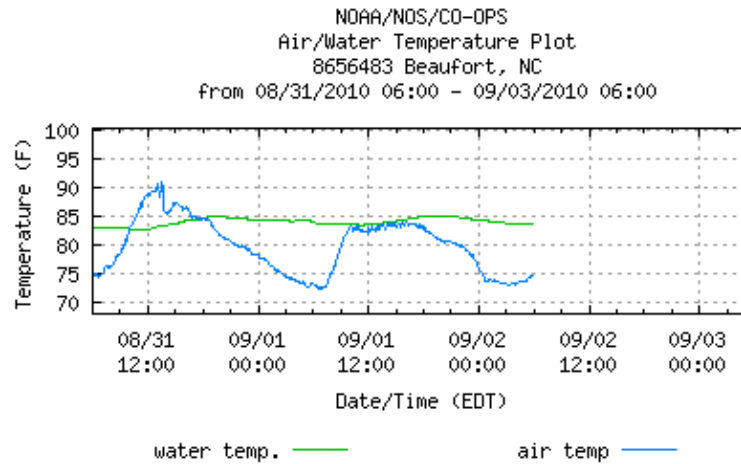
Beaufort, NC - [Return to List](#)



Beaufort, NC - [Return to List](#)



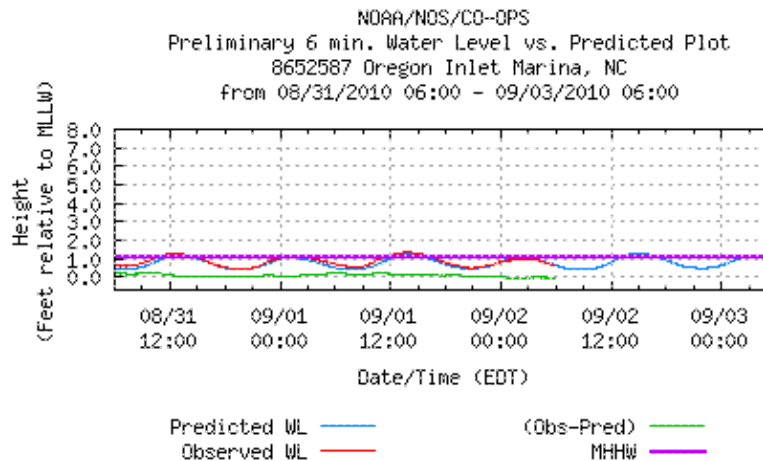
Beaufort, NC - [Return to List](#)



Last Observed Sample: 09/02/2010 05:48 (EDT)

Water Temperature: 83.8° F Air Temperature: 74.7° F

Oregon Inlet Marina, NC - [Return to List](#)

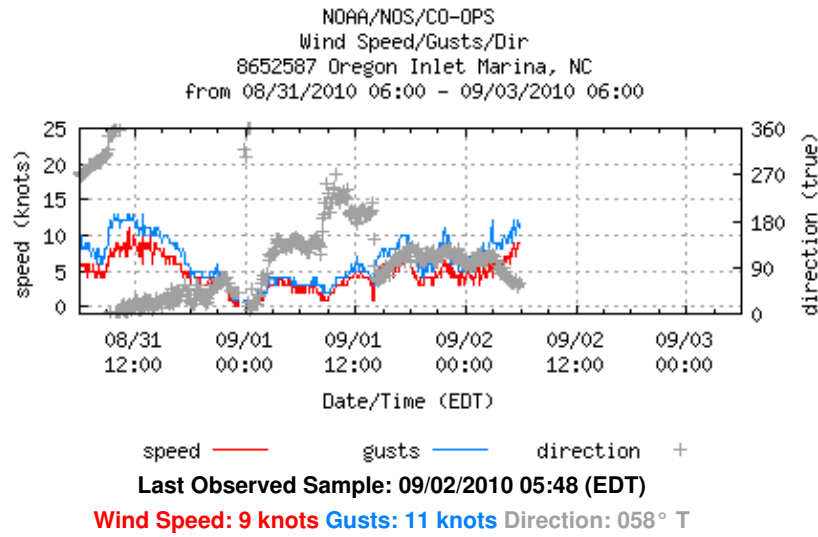


Last Observed Sample: 09/02/2010 05:48 (EDT)

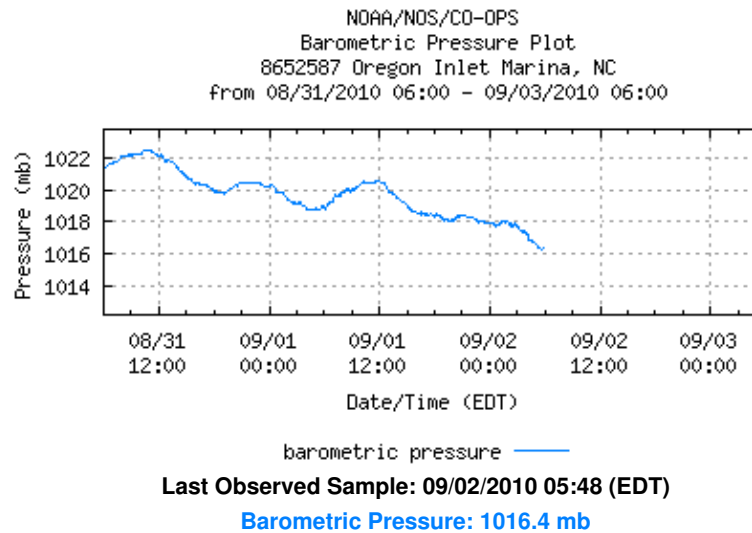
Relative to **MLLW**: Observed: 0.61 ft. Predicted: 0.68 ft. Residual: -0.07 ft.

Historical Maximum Water Level: Sep 16 1999, 4.49 ft. above **MHHW**

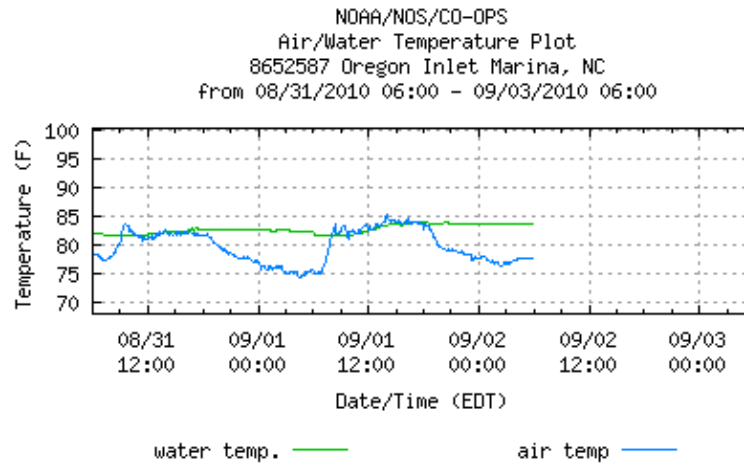
Oregon Inlet Marina, NC - [Return to List](#)



Oregon Inlet Marina, NC - [Return to List](#)



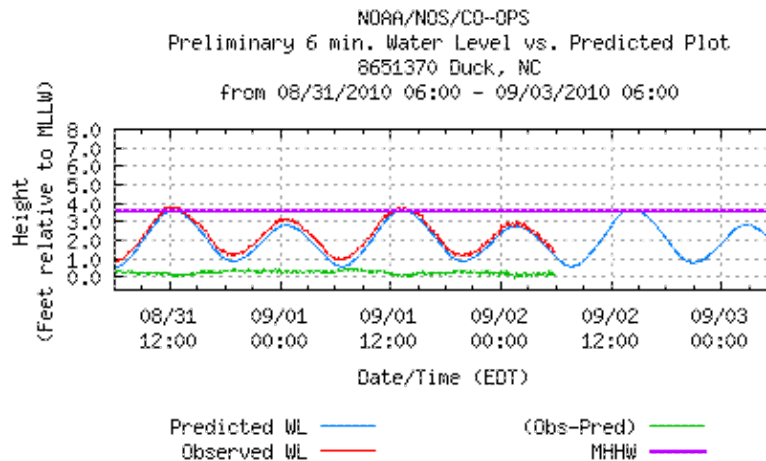
Oregon Inlet Marina, NC - [Return to List](#)



Last Observed Sample: 09/02/2010 05:48 (EDT)

Water Temperature: 83.7° F Air Temperature: 77.7° F

Duck, NC - [Return to List](#)

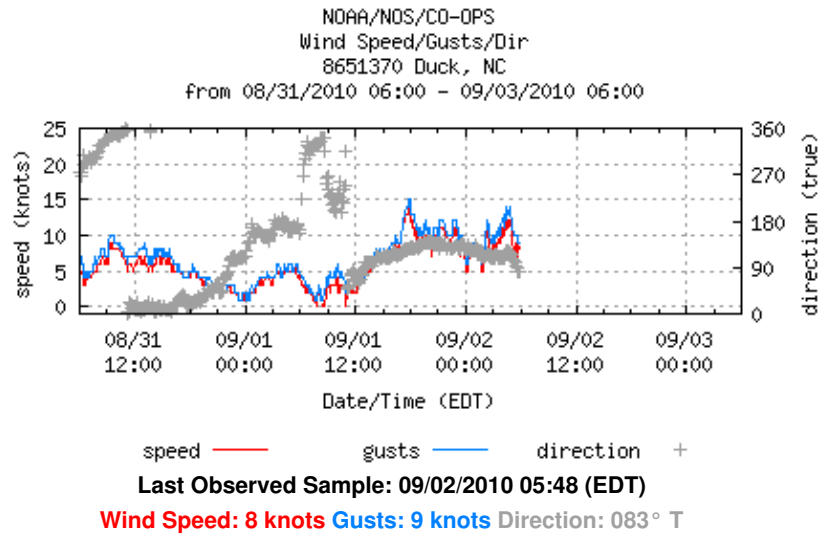


Last Observed Sample: 09/02/2010 05:48 (EDT)

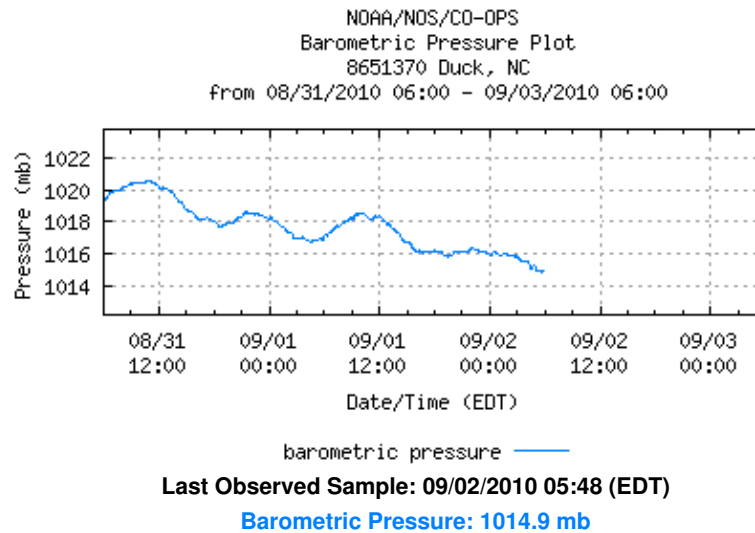
Relative to **MLLW**: Observed: 1.38 ft. Predicted: 1.20 ft. Residual: 0.18 ft.

Historical Maximum Water Level: Aug 30 1999, 3.23 ft. above **MHHW**

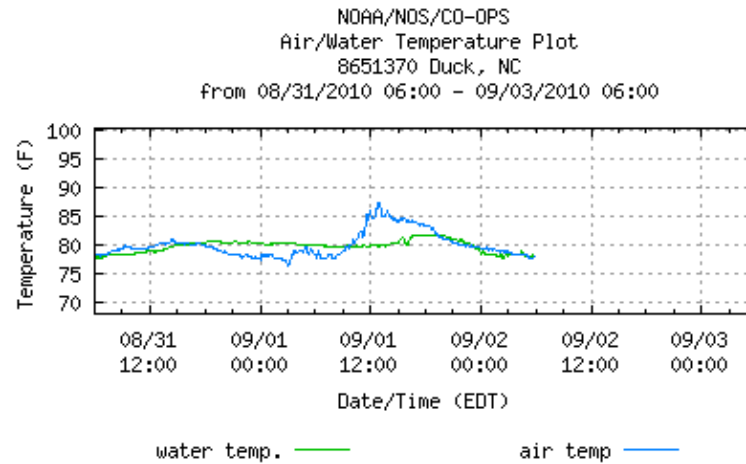
Duck, NC - [Return to List](#)



Duck, NC - [Return to List](#)



Duck, NC - [Return to List](#)



Last Observed Sample: 09/02/2010 05:48 (EDT)

Water Temperature: 78.1° F Air Temperature: 78.1° F

Center for Operational Oceanographic Products & Services (CO-OPS) | National Ocean Service (NOS)
National Oceanic and Atmospheric Administration | U.S. Department of Commerce